April 2, 1998

U.S. Army Corps of Engineers
301 S Park, Drawer 10014
Helena, MT 59626-0014

401 Water Quality Certification:	#199790882	O'Hair -Yellowstone River
	#199790883	Allmon -Yellowstone River
	#199790885	DePuy - Yellowstone River
	#199790899	Dana – Yellowstone River
	#199890079	Gamble – Yellowstone River

Gentlemen:

All the projects as proposed involve the use of massive amounts of rock that may effect the river's natural tendency to migrate across the floodplain. The projects may individually and cumulatively, detrimentally effect other Yellowstone landowners and the river. Also, because of the amounts of bedload transport they will trigger and the obstructions associated with the proposed structures, they may adversely effect water quality standard's designated uses that involve the "propagation of fish and wildlife and for recreation in and on the water".

The cumulative impacts associated with these and past projects on the Yellowstone River have not been determined. We support a cumulative impacts study and comprehensive watershed planning efforts, but prefer to see approval of smaller scope projects which address emergency or high risk property losses.

All the projects are on segments of the Yellowstone River already considered as "water quality limited" by the Montana Department of Environmental Quality (DEQ), with one of the probable causes – habitat alterations and the probable source – streambank modifications/destabilization. The projects as proposed may contribute to these impairments.

Based on the preceding issues/concerns, the following 401 water quality certification conditions are intended to lessen potential impacts, while providing for interim protection measures, prior to completion of a river cumulative impacts study:

1. Application # 199890079 – David Gamble

   Reduce the total amount of rock in the current design by 75%. Design emphasis might be directed at hardening the toe of the bank with rock and utilizing vegetative material for the remainder of the design.

   Structures should not exceed 10% of the low water channel width.

   Fence the restored bank area or provide assurances the reclaimed bank will not be effected by grazing for a minimum of five years.

2. Application # 199790883 – Charles Allmon

   401 certification is being withheld pending more information on the extent of impacts associated with excavation at the site without a storm water permit. Additional conditions may be necessary to mitigate impacts associated with the lack of erosion control measures at the site. When the storm water permit violation is resolved, the following 401 certification conditions will be necessary:

      Reduce the total amount of rock in the current design by 75%. Design emphasis might be directed at hardening the toe of the slope with rock and utilizing vegetative material for the remainder of the design.

      Structures should not exceed 10% of the low water channel width.

      Fence the restored bank area or provide assurances the reclaimed bank will not be effected by grazing for a minimum of five years.

3. Application # 199790882 – Jerry O'Hair

   Remove barbs 14 and 15 and shorten 13 in Section A of the design. Reduce the amount of rock riprap between the barbs by a minimum of 50% and supplement with vegetative materials.

   Reduce the amount of rock between the rock barbs in Section B of the design by a minimum of 75% and supplement with vegetative materials.

   Structures should not exceed 10% of the low water channel width.

   Both sections of the reclaimed bank should be fenced or assurance provided that the banks will not be adversely effected by grazing for a minimum of five years.

4. Application # 199790885 – DePuy

   Reduce the total amount of rock in the current design by 50%. Design emphasis might be directed at hardening the toe of the slope with rock and utilizing vegetative material for the remainder of the design.

   Structures length should not exceed 10% of the low water channel width.

   Fence the reclaimed area or provide assurances the area won't be adversely effected by grazing for a minimum of five years.

5. Application # 199790899 – Dana

   Eliminate the current large barb design at Site E. There is a strong potential to adversely effect recreation, a beneficial use, through the creation of a boating hazard (reverse hydraulic). Also, tons of bedload/sediment will be mobilized and/or accreted by the proposed structure that may adversely effect fisheries/habitat. The current authorized maintenance project to repair the spring creek bank riprap should be sufficient to protect the spring creed from potential high Spring flows.

   The grade control structures proposed at Site D should be eliminated from the design until more cumulative impacts information is gathered. The structures will tend to permanently eliminate natural channel flow shifts.

   Rock in the remainder of the proposed structures should be reduced by 50% with vegetative material supplements.

   Structures should not exceed 10% of low water channel width.

   The reclaimed areas should be fenced or assurances provided that the sites will not be adversely effected by grazing for a minimum of five years.

Conditions to all the applications:

   Monitoring should be required. Minimally, as-builts, photo points and some cross sections should be considered in the plan.

   Provisions should be required to assure retrieval of rock that results from structure failure.

   Assurances should be provided that require height adjustments to structures that impair boating traffic at low flows.

   Assurances should be provided that require structure modification or removal if they demonstrate adverse impacts to adjacent river features.

Some of these 401 water quality conditions clarification or minor modifications to mesh with permit conditions you are considering for the projects. I will be available to assist with completion of final conditions and/or to answer questions about our conditions.

Sincerely,

Jeff Ryan
Water Quality/Wetlands Specialist

Cc: Bonnie Lovelace, DEQ
Dick Blodnick, EPA